WHAT IS CLAIMED IS:

1. A composite substrate in which an electrode and a dielectric layer are successively formed on an electrically insulating substrate,

said substrate having a coefficient of thermal expansion of 10 to 20 ppm/K.

2. The composite substrate of claim 1 wherein said substrate is composed mainly of magnesia (MgO), steatite ($MgO \cdot SiO_2$) or forsterite ($2MgO \cdot SiO_2$).

3. The composite substrate of claim 1 or 2 wherein said dielectric layer is a sintered ceramic body composed mainly of barium titanate ($BaTiO_3$).

4. The composite substrate of claim 3 wherein said dielectric layer contains one or more oxides selected from the group consisting of manganese oxide (MnO), magnesium oxide (MgO), tungsten oxide (WO_3), calcium oxide (CaO), zirconium oxide (ZrO_2), niobium oxide (Nb_2O_5) and cobalt oxide (Co_2O_3).

5. The composite substrate of claim 3 wherein said dielectric layer contains the oxides of one or more elements selected from the group consisting of rare earth elements Sc, Y, La, Ce, Pr, Nd, Pm, Sm, Eu, Gd, Tb, Dy, Ho, Er, Tm, Yb and Lu.

6. The composite substrate of claim 3 wherein said dielectric layer contains a vitreous component composed of silicon oxide (SiO_2).

7. An EL device comprising at least a light emitting layer and a second electrode on the composite substrate of claim 1.

8. The EL device of claim 7 further comprising a second insulator layer between the light emitting layer and the second electrode.